

IN THE CLAIMS

Please cancel claims 7, 15, 25, and 35 amend claims 1, 9, 17, 19, 27, 37, and 44 and add new claims 45-62 as follows:

1. (CURRENTLY AMENDED) A television system comprising:
a receiver for receiving broadcast television content comprising multiple frames of data;
means for inserting multiple copies of receiver identification data into data representing a frame of the television content; and
means for generating a display of television images based upon the data representing the television content and the receiver identification data.
2. (ORIGINAL) The television system of Claim 1, wherein the receiver identification data includes at least one of a receiver serial number, a name of an owner of the receiver, an address of an owner of the receiver, a phone number of an owner of the receiver, a name of a manufacturer of the receiver and a model name of the receiver.
3. (ORIGINAL) The television system of Claim 1, wherein the receiver identification data includes a date stamp representing the date on which the receiver identification data was inserted into the data representing the television content.
4. (ORIGINAL) The television system of Claim 1, wherein the receiver identification data includes a time stamp representing the time at which the receiver identification data was inserted into the data representing the television content.
5. (ORIGINAL) The television system of Claim 1, further comprising a removable access card that stores television channel access data and billing data, and wherein the receiver identification data is obtained from the removable access card.
6. (ORIGINAL) The television system of Claim 1, wherein the receiver identification data is inserted into the data representing the television content by modifying saturation data of the television content.

7. (CANCELED)

8. (ORIGINAL) The television system of Claim 1, wherein the means for generating a display of television images generates a display of program guide images, and wherein the means for inserting inserts receiver identification data into data representing the program guide images prior to their display.

9. (CURRENTLY AMENDED) A method of modifying received television content comprising:

receiving broadcast television content comprising a plurality of frames of data with a receiver;

inserting multiple copies of receiver identification data into data representing a frame of the television content; and

generating a display of television images based upon the data representing the television content and the receiver identification data.

10. (ORIGINAL) The method of Claim 9, wherein the receiver identification data includes at least one of a receiver serial number, a name of an owner of the receiver, an address of an owner of the receiver, a phone number of an owner of the receiver, a name of a manufacturer of the receiver and a model name of the receiver.

11. (ORIGINAL) The method of Claim 9, wherein the receiver identification data includes a date stamp representing the date on which the receiver identification data was inserted into the data representing the television content.

12. (ORIGINAL) The method of Claim 9, wherein the receiver identification data includes a time stamp representing the time at which the receiver identification data was inserted into the data representing the television content.

13. (ORIGINAL) The method of Claim 9, wherein the receiver identification data is obtained from a removable access card that stores television channel access data and billing data.

14. (ORIGINAL) The method of Claim 9, wherein the receiver identification data is inserted into the data representing the television content by modifying saturation data of the television content.

15. (CANCELED)

16. (ORIGINAL) The method of Claim 9, and further comprising generating a display of program guide images, and inserting receiver identification data into data representing the program guide images prior to their display.

17. (CURRENTLY AMENDED) A receiver for receiving broadcast television content having multiple frames of data and inserting receiver identification data into generated images of television content in a manner that is undetectable to a casual observer of such images, the receiver comprising:

a tuner for receiving a plurality of television channels and outputting a first television channel;

a buffer coupled to the tuner for storing a first image frame from the first television channel, the first image frame including a multiplicity of pixel data;

a memory for storing identification data that provides a unique identification of the receiver;

a controller coupled to the buffer and the memory, the controller retrieving identification data from the memory and changing values of the pixel data to values of the identification data, the controller thereby embedding multiple copies of the identification data into the first image frame; and

a display generator for generating a display of the first television channel including the first image frame.

18. (ORIGINAL) A method of receiving broadcast television content having multiple frames of data with a receiver and inserting receiver identification data into generated images of television content in a manner that is undetectable to a casual observer of such images, the method comprising:

receiving a plurality of television channels with a tuner and outputting a first television channel;

storing a first image frame from the first television channel, the first image frame including a multiplicity of pixel data;

storing identification data that provides a unique identification of the receiver;

modifying a subset of the pixel data to represent the multiple copies of the identification data, multiple copies of the identification data thereby being embedded into the first image frame; and

generating a display of the first television channel including the first image frame.

19. (CURRENTLY AMENDED) A program reception system comprising:

a receiver for receiving transmitted data representing program content comprising multiple frames:

means for modifying a frame of the data representing the program content to include multiple copies of receiver identification data; and

means for providing the modified data representing the program content to a presentation device.

20. (ORIGINAL) The apparatus of Claim 19, wherein the receiver identification data is selected from the group comprising:

a receiver serial number;

a name of an owner of the receiver;

an address of an owner of the receiver;

a phone number of an owner of the receiver;

a name of a manufacturer of the receiver; and

a model name of the receiver.

21. (ORIGINAL) The apparatus of Claim 19, wherein the receiver identification data includes a date stamp representing a date on which the data representing the program content was modified to include the receiver identification data.

22. (ORIGINAL) The apparatus of Claim 19, wherein the receiver identification data includes a time stamp representing the time at which the data representing the program content was modified to include the receiver identification data.

23. (ORIGINAL) The apparatus of Claim 19, further comprising a removable access card that stores program channel access data and billing data, and wherein the receiver identification data is obtained from the removable access card.

24. (ORIGINAL) The apparatus of Claim 19, wherein the program content includes television content and the receiver identification data is inserted into the data representing the program content by modifying saturation data of the television content.

25. (CANCELED)

26. (ORIGINAL) The apparatus of Claim 19, wherein the means for providing the modified data representing the program content to a presentation device provides a display of at least one program guide image, and wherein the means for modifying the data representing the program content to include receiver identification data inserts receiver identification data into data representing the program guide image prior to display of the program guide image.

27. (CURRENTLY AMENDED) A method of modifying received program content comprising:

receiving broadcast data representing program content having multiple frames;
modifying a frame of the data representing the program content to include multiple copies of the receiver information data; and
providing the modified data representing the program content to a presentation device.

28. (ORIGINAL) The method of Claim 27, wherein the step of modifying the data representing the program content to include receiver information data comprises the step of substituting receiver identification data for a subset of the data representing the program content.

29. (ORIGINAL) The method of Claim 27, further comprising the step of presenting the modified program content to the user on the presentation device.

30. (ORIGINAL) The method of Claim 27, wherein the receiver identification data is selected from the group comprising:

- a receiver serial number;
- a name of an owner of the receiver;
- an address of an owner of the receiver;
- a phone number of an owner of the receiver;
- a name of a manufacturer of the receiver; and
- a model name of the receiver.

31. (ORIGINAL) The method of Claim 27, wherein the receiver identification data includes a date stamp representing the date on which the receiver identification data was inserted into the data representing the program content.

32. (ORIGINAL) The method of Claim 27, wherein the receiver identification data includes a time stamp representing the time at which the receiver identification data was inserted into the data representing the program content.

33. (ORIGINAL) The method of Claim 27, wherein the receiver identification data is obtained from a removable access card that stores program channel access data and billing data.

34. (ORIGINAL) The method of Claim 27, wherein the program content comprises television content, and the receiver identification data is inserted into the data representing the program content by modifying saturation data of the television content.

35. (CANCELED)

36. (ORIGINAL) The method of Claim 27, further comprising the step of generating a display of program guide images, and inserting receiver identification data into data representing the program guide images prior to their display.

37. (CURRENTLY AMENDED) A receiver for receiving transmitted program content having multiple frames of data, comprising:

a tuner, for receiving at least one of a plurality of program channels;

a memory, communicatively coupled to the tuner for storing at least a portion of data representing the program content;

a controller, communicatively coupled to the memory, the controller for modifying at least a portion of a frame of the data representing program content according to multiple copies of the receiver identification data.

38. (ORIGINAL) The receiver of Claim 37, wherein the program content comprises television content, the portion of data representing the program content comprises pixel data, and wherein:

the controller modifies at least a portion of the pixel data according to the receiver identification data.

39. (ORIGINAL) The receiver of Claim 37, further comprising a second memory, communicatively coupled to the controller, for storing the identification data.

40. (ORIGINAL) The receiver of Claim 37, wherein the identification data is selected from the group comprising:

a receiver serial number;

a name of an owner of the receiver;

an address of an owner of the receiver;

a phone number of an owner of the receiver;

a name of a manufacturer of the receiver; and

a model name of the receiver.

41. (ORIGINAL) The receiver of Claim 37, wherein the receiver identification data includes date data representing a date on which the data representing the program content was modified to include the receiver identification data.

42. (ORIGINAL) The receiver of Claim 37, wherein the receiver identification data includes time data representing a time at which the data representing the program content was modified to include the receiver information data.

43. (ORIGINAL) The receiver of Claim 37, wherein the receiver identification data is obtained from an access card communicatively coupleable with the receiver.

44. (CURRENTLY AMENDED) An article of manufacture embodying logic for computing a plurality of order-based analysis functions for records stored in a table in a computer system comprising:

receiving broadcast data representing program content having multiple frames;
modifying a frame of the data representing the program content to include multiple copies of the receiver information data; and
providing the modified data representing the program content to a presentation device.

45. (NEW) The television system of claim 1, wherein the means for inserting multiple copies of receiver identification data into data representing a frame of the television content comprise:

means for dividing the frame into a plurality of groups;
means for inserting a copy of the receiver identification data in each of the plurality of groups.

46. (NEW) The television system of claim 45, wherein the frame is an image frame, and each of the groups comprises a plurality of lines.

47. (NEW) The television system of claim 46, wherein each line comprises a plurality of pixels, and the means for inserting a copy of the receiver identification data in each of the plurality of groups comprises:

means for repeatedly substituting a bit of the receiver identification data for a bit of a pixel of the line and skipping a plurality of pixels, for each of the lines in the group.

48. (NEW) The method of claim 9, wherein the step of inserting multiple copies of receiver identification data into data representing a frame of the television content comprises the steps of:

dividing the frame into a plurality of groups; and

inserting a copy of the receiver identification data in each of the plurality of groups.

49. (NEW) The method of claim 48, wherein the frame is an image frame, and each of the groups comprises a plurality of lines.

50. (NEW) The method of claim 49, wherein each line comprises a plurality of pixels, and the step of inserting a copy of the receiver identification data in each of the plurality of groups comprises the step of:

repeatedly substituting a bit of the receiver identification data for a bit of a pixel of the line and skipping a plurality of pixels for each of the lines in the group.

51. (NEW) The receiver of claim 17, wherein the controller comprises:

means for dividing the first image frame into a plurality of groups;

means for inserting a copy of the receiver identification data in each of the plurality of groups.

52. (NEW) The receiver of claim 51, wherein the first image frame comprises a plurality of lines and each of the groups comprises a plurality of lines.

53. (NEW) The receiver of claim 52, wherein each line comprises a plurality of pixels, and the means for inserting a copy of the receiver identification data in each of the plurality of groups comprises:

means for repeatedly substituting a bit of the identification data for a bit of a pixel of the line and skipping a plurality of pixels for each of the lines in the group.

54. (NEW) The method of claim 18, wherein the step of modifying a subset of the pixel data to represent the multiple copies of the identification data comprises the steps of:

dividing the first image frame into a plurality of groups; and

inserting a copy of the identification data in each of the plurality of groups.

55. (NEW) The method of claim 54, wherein each of the groups comprises a plurality of lines.

56. (NEW) The method of claim 55, wherein each line comprises a plurality of pixels, and the step of inserting a copy of the identification data in each of the plurality of groups comprises the step of:

repeatedly substituting a bit of the identification data for a bit of a pixel of the line and skipping a plurality of pixels for each of the lines in the group.

57. (NEW) The program reception system of claim 19, wherein the means for modifying the frame of the data representing the program content to include multiple copies of receiver identification data comprises:

means for dividing the frame into a plurality of groups;

means for inserting a copy of the receiver identification data in each of the plurality of groups.

58. (NEW) The program reception system of claim 57, wherein the frame is an image frame comprising a plurality of lines, and each of the groups comprises a plurality of lines.

59. (NEW) The program reception system of claim 58, wherein each line comprises a plurality of pixels, and the means for inserting a copy of the receiver identification data in each of the plurality of groups comprises:

means for repeatedly substituting a bit of the receiver identification data for a bit of a pixel of the line and skipping a plurality of pixels for each of the lines in the group.

60. (NEW) The method of claim 27, wherein step of modifying the frame of the data representing the program content to include multiple copies of the receiver information data comprises the steps of:

dividing the frame into a plurality of groups;

inserting a copy of the receiver identification data in each of the plurality of groups.

61. (NEW) The method of claim 60, wherein the frame is an image frame, and each of the groups comprises a plurality of lines.

62. (NEW) The method of claim 61, wherein each line comprises a plurality of pixels, and the means for inserting a copy of the receiver identification data in each of the plurality of groups comprises:

means for repeatedly substituting a bit of the receiver identification for a bit of a pixel of the line and skipping a plurality of pixels for each of the lines in the group.